NEW RECORD OF ACARINE ECTOPARASITES ON THE NORTHERN PALM SQUIRREL, *FUNAMBULUS PENNANTI* WROUGHTON FROM INDIA[1]

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While going through the literature on acarine ectoparasites of squirrels in India, it was found that only two species of mites, namely *Gahrliepia ligula* (Radford, 1946) and *Trombicula longiseta* Womersley, 1952 are known from the squirrel *Callosciurus* sp. in India. *Gahrliepia ligula* has been recorded from Banital, Gurais, Jhangar, Kanzalwan, Naushera and Srinagar in Jammu and Kashmir; Kanha National Park in Madhya Pradesh; Ledo area and Imphal in Manipur and Binaguri and Jalpaiguri District in Bengal. It is found mostly on rats *(Bandicota indica, Rattus rattus bullocki, Rattus rattus narbadae, R. r. rufescens* and *R. manipulus),* mice *(Mus booduga booduga* and *Mus musculus homourus)* and shrews *(Anourosorex sanamipes* and *Suncus stoliczkanus)* and, rarely, on squirrels *(Callosciurus* sp.). *Trombicula longiseta* has been recorded from Kanglatongbi, near Imphal in Manipur, on both rat *(Rattus rattus bullocki)* and squirrel *(Callosciurus* sp.) (Prasad, 1974).

During a survey of the acarine ectoparasites of squirrels in Punjab, 94 specimens were collected from 43 specimens of *Funambulus pennanti.*

Of these acarines, 1 specimen belongs to the suborder Ixodides, 66 specimens (4 males, 20 nymphs and 42 females) to the suborder Mesostigmata, 5 specimens to the suborder Trombidiformes and 22 specimens to the suborder Sarcoptiformes. So far, we have been able to identify only the single specimen belonging to the suborder Ixodides, 25 female specimens belonging to the suborder Mesostigmata and 18 specimens belonging to the suborder Sarcoptiformes.

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Suborder I. IXODIDES
Family IXODIDAE

Rhipicephalus turanicus Pomerantzev

Collection Data[3] – 1L[4], 26. ix. 1975

Remarks – *Rhipicephalus turanicus* Pomerantzev has already been reported from the States of Andhra Pradesh, Gujarat, Jammu and Kashmir, Madhya Pradesh, Maharashtra and Tamil Nadu on buffalo, jungle cat, dog, donkey, goat, rat *(Rattus rattus rufescens)* and sheep (Dhanda & Rao, 1969). In Punjab it has been reported from a rat *(Millardia meltada)* by Miranpuri *et al.* (1975).

Suborder II. MESOSTIGMATA
Family 1 LAELAPTIDAE

1. *Androlaelaps zuluensis* (Zumpt)

Collection Data – 1F, 17. vii. 1975

2. Androlaelaps sp_1

Collection Data – 2F, 23.vi. 1975; 1F, 17.vii. 1975; 5F, Village Barewal (Ludhiana District), 5. viii. 1975; 10F, 26.x.1975.

3. Androlaelaps sp_2

Collection Data – 1F, 17.vii.1975.

Family 2. DERMANYSSIDAE

**Allodermanyssus sanguineus* (Hirst)

Collection Data – 2F, Village Barewal (Ludhiana District), 5.viii.1975

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[3]Unless otherwise mentioned all are collected from Ludhiana.

[4]L = larva, F = female

*recently recorded by Srivastava and Wattal (1973)

Suborder III. SARCOPTIFORMES
Family ACARIDAE

1. *Tyrophagus castrellanii* Hirst

Collection Data – 17F, Village Barewal (Ludhiana District), 5.viii. 1975.

2. *Tyrophagus lintneri* (Osborne)

Collection Data – 1F, 26.ix.1975.

It is interesting to note that all the above mentioned species of mites (except the one marked with asterik) are recorded for the first time in India.

Four specimens belonging to the house fly mite, *Macrocheles muscadomesticae* (Scopoly, 1972), have also been collected on this squirrel which might be due to contamination. The house fly mite, *Macrocheles muscadomesticae* is also recorded for the first time in India.

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REFERENCES

Dhanda, V. and T.R. Rao. 1969. The status of *Rhipicephalus sanguineus* (Latreille) and *R. turanicus* Pomerantzev (Acarina: Ixodidae) in India. J. Bombay Nat. Hist. Soc. 66 (1): 211-214.

Miranpuri, G.S., O.S. Bindra, and V. Prasad. 1975. Tick fauna of North-Western India (Acarina: Metastigmata). Int. J. Acar.1 (1): 48-49.

Prasad, V. 1974. A catalogue of mites of India. Indira Acarology Publishing House, Ludhiana (Punjab), India, 1-320 p.

Pomerantzev, B.I. 1950. Fauna of USSR. Arachnida 4 (2), Ixodid ticks (Ixodidae). Academy of Sciences, USSR, New Saries No. 41: 1-224. English translation published by the American Institute of Biological Sciences, Washington, D.C., 1959.

Radford, C.D. 1946. New species of larval mites (Acarina: Trombiculidae) from Manipur, India. Proc. Zool. Soc. London *116* (2): 256.

Srivastva, S.P. and B.L. Wattal. 1973 (Pubd. 1975). Studies on the distribution of ectoparasites and their vertebrate hosts in urban, semi-urban (Peripheral) and sylvatic zones of Nagpur city and neighbouring area (Maharashtra-India). Indian J. Ent. 35 (4): 306-324.

Womersley, H. 1952. The scrub-typhus and scrub itch mites (Trombiculidae: Acarina) of the Asiatic-Pacific region. Rec. S. Australian Mus., 10: 61-62, pl. 8, fig. A-E; 296-297, pl. 77, fig. B-F; 399, pl. 108, fig. F-J.